

REQUEST FOR BIDS

**Replacement of an Air Cooled Water Chiller
at the BLW Administrative Offices**

RFB-15-36414



**CITY OF MARIETTA
PURCHASING DEPARTMENT
205 Lawrence Street
Marietta, Georgia
30060**

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REQUEST FOR BID NO. RFB-15-36414

FOR

**Replacement of an Air Cooled Water Chiller at the BLW Administrative
Offices**

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INSTRUCTIONS TO BIDDER FOR INVITATION TO BID

ARTICLE 1 TIME AND DATE DUE

The City of Marietta, a political subdivision of the State of Georgia (hereinafter "City of Marietta" or the "City") shall receive sealed bids from individuals, corporations, partnerships, and other legal entities organized under the laws of the State of Georgia or authorized to conduct business in the State of Georgia until 2:00 P.M., Wednesday, November 19, 2014; for the following:

Replacement of an Air Cooled Water Chiller at the BLW Administrative Offices

RFB-15-36414

All bid requirements shall be in accordance with Specifications and Guidelines, Exhibit "D" (Pages BF-1- BF-15), attached hereto.

All pricing relative to this bid document shall be completed on the Bid Pricing Form, Exhibit "E" (Page BF-16- BF-17) and attached hereto

ARTICLE 2 OPENING LOCATION & TIME

This bid shall be opened at 2:00 P.M., Wednesday, November 19, 2014; at the City of Marietta, Purchasing Department, First Floor, 205 Lawrence Street, Marietta, Georgia 30060.

ARTICLE 3 DELIVERY REQUIREMENTS

Any bids received after the stated time and date shall not be considered. The time/date stamp clock located in the Purchasing Department shall serve as the official authority to determine lateness of any bid. It shall be the sole responsibility of the bidder to have their bid delivered to the City of Marietta Purchasing Department for receipt on or before the above stated time and date. If a bid is sent by the U.S. Postal Service, the bidder shall be responsible for its timely delivery to the Purchasing Department. Bids delayed by the mail shall not be opened at the public opening, and arrangements shall be made for their return at the bidder's request and expense. The bid opening time shall be strictly observed. Under no circumstance shall a bid delivered after the specified time be considered. Such bids will be returned unopened.

ARTICLE 4 PRE-PROPOSAL CONFERENCE

There shall be a Mandatory Pre-Bid Conference to be held Wednesday, November 5, 2014 at 2:00 P.M., located at Marietta Board of Lights and Water, Lobby Area, 675 N. Marietta Parkway, Marietta, GA 30060. The purpose of the conference is to review the specifications and familiarize the bidder with the site and scope of the work. This is a Mandatory Pre-Bid Conference and only registered attendee's bids will be accepted.

ARTICLE 5 CLARIFICATION & ADDENDA

Each bidder shall examine all invitation for bid documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to the invitation to bid shall be made through Mr. Jameison A. Henderson, Purchasing Agent II (770) 794-5697, the City of Marietta, Purchasing Department. The City shall not be liable for oral interpretations given by any City employee, representative, or others. The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given.

If any addenda are issued to this invitation for bid, the City shall attempt to notify all prospective bidders who have secured the same, however, it shall be the responsibility of each bidder prior to submitting their bid to contact the City of Marietta, Purchasing Department at (770) 794-5697 to determine if any addenda were issued and to make sure such addenda is a part of their bid. *EACH BIDDER SHALL ACKNOWLEDGE IN ITS BID ALL ADDENDA RECEIVED.*

ARTICLE 6 USE, CLARIFICATION AND RETURN OF DRAWINGS AND SPECIFICATIONS

All Drawings and Specifications for the work are the sole property of the Owner and intended solely for use in the work contemplated in such Drawings and Specifications. Except for a bidder whose bid is accepted, said Drawings and Specifications shall be returned in good condition immediately upon receipt of notification that a bid has been accepted or that no award of said bid shall be accepted.

If there are any discrepancies in, or omissions from, the Drawings or Specifications, or if the bidder is in doubt as to the true meaning of any part of the Contract Document, he shall request clarification from The Purchasing Department. Such request shall be in writing and shall be made not less than forty-eight hours prior to the time scheduled for the termination of bidding. Interpretations in response to inquiries for any bidder, clarifications or corrections issued in the form of addenda shall be mailed to each bidder. If the bidder fails to request clarification regarding methods of performing work or the material required, his bid shall be deemed to include the method requiring the greater quantity of work or material or upon the material of greatest cost indicated.

ARTICLE 7 BUSINESS LICENSE /OCCUPATIONAL LICENSE

The bidder shall provide appropriate proof of an Occupational Tax license.

ARTICLE 8 SEALED & MARKED

SIX (6) SIGNED COPIES OF YOUR BID SHALL BE SUBMITTED, ONE (1) ORIGINAL AND FIVE (5) COPIES IN ONE (1) SEALED PACKAGE, CLEARLY MARKED ON THE OUTSIDE:

REQUEST FOR BID No. RFB-15-36414

Replacement of an Air Cooled Water Chiller at the BLW Administrative Offices

**and addressed to: City of Marietta, Purchasing Department
 205 Lawrence Street
 Marietta, Georgia 30060
 Attention: Jameison A. Henderson
 Purchasing Agent II**

ARTICLE 9 LEGAL NAME

Bids shall clearly indicate the legal name, address and telephone of the respective bidder (company, firm, partnership, individual). Bids shall be signed below the typed or printed name and title of the signer. The signer shall have the authority to bind the bidder to the submitted bid.

ARTICLE 10 BID EXPENSES

All expenses for making bids to the City are to be borne by the bidder.

ARTICLE 11 IRREVOCABLE OFFER

Any bid may be withdrawn up until the date and time set above for the opening of bid. Any bid not withdrawn shall, upon opening, constitute an irrevocable offer for a period of One Hundred Fifty (150) days to sell to The City of Marietta the goods or services set forth in the attached specifications until one or more of the bids have been duly accepted by the City. All prices shall be quoted F.O.B. City of Marietta, Georgia.

Bid modifications shall be accepted from a bidder only if received prior to the scheduled bid opening, in writing, properly signed by the authorized representative of the bidder's (company, firm, partnership, individual). Bid modifications shall be submitted as referenced in Article No. 8 and clearly marked "BID MODIFICATIONS".

Mathematical errors shall be corrected by the City, i.e.: misplaced decimal points shall be corrected; in discrepancies between unit price vs. extended price, unit price shall govern; errors in extension of unit prices shall be corrected and mathematical errors shall be corrected.

ARTICLE 12 RESERVED RIGHTS

The City reserves the right to accept or reject any and or all bids, to waive irregularities and technicalities, award the contract in the best interest of the City of Marietta or to request re-bid. The City reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirements of the City.

For each item or for all items combined, the bid of the lowest, responsible and responsive bidder shall be accepted, unless all bids are rejected. The lowest responsive bidder shall mean the bidder who makes the lowest bid to sell goods and/or services of a quality which conforms closest to the quality of goods and/or services set forth in the attached specifications or otherwise required by the City, and conforms to all material aspects of the requirements set forth in the invitation for bid. To be a responsible bidder, the bidder shall be fit and capable to perform the work as required, shall have the capability in all respects to perform fully the contract requirements, and shall have the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which shall assure good faith performance. Also, the City reserves the right to make such investigations as it deems necessary to determine the ability of any bidder to deliver the goods or service requested.

Information the City deems necessary to make this determination shall be provided by the bidder. Such information may include, but shall not be limited to current financial statements; verification of availability of equipment and personnel; and past performance records.

ARTICLE 13 APPLICABLE LAWS

Bidders shall be authorized to transact business in the State of Georgia. All applicable laws and regulations of the State of Georgia and ordinances and regulations of the City of Marietta shall apply to any resulting agreement.

ARTICLE 14 CODE OF ETHICS

With respect to this bid, if any bidder violates or is a part to a violation of the State of Georgia Code of Ethics for Public Officers and Employees, such bidder may be disqualified from furnishing the goods or services for which the bid is submitted and shall be further disqualified from submitting any future bids for goods or services for the City of Marietta.

ARTICLE 15 COLLUSION

By offering a submission to this invitation for bid, the bidder certifies that the bidder has not divulged to, discussed or compared his bid with other bidders and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies, and in the case of a joint bid each party thereto certifies as to his/her own organization, that in connection with this bid:

- 15.1 Any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and or cost data, with any other bidder or with any competitor;
- 15.2 Any prices and/or cost data quoted for this bid have not been knowingly disclosed by the bidder and shall not knowingly be disclosed by the bidder prior to the scheduled opening directly or indirectly to any other bidder or to any competitor;
- 15.3 No attempt has been made or shall be made by the bidder to induce any other person or firm to submit a bid for the purpose of restricting competition;
- 15.4 The only person or persons interested in this bid, principal/principals is/are named therein and that no person other than therein mentioned has any interest in his bid or in the contract to be entered into;
- 15.5 No person or agency has employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or established commercial agencies maintained by the Purchaser for the purpose of doing business.

ARTICLE 16 CONTRACT FORMS

Any agreement, contract or Purchase Order resulting from the acceptance of a bid shall be on forms provided by the City. Each bidder shall state in his bid, in words and numerical, written in ink or typed, the price for which he shall perform the work or supply the items required by the specifications, plans and contract documents. Any erasures, delineations or alterations are to be clear and initialed by the person signing.

ARTICLE 17 NOTICE OF ACCEPTANCE

The contract shall be deemed as having been awarded when the formal notice of acceptance/contract is issued to the Contractor(s). After award and acceptance the successful Contractor(s) may be posted at the Marietta Purchasing website.

ARTICLE 18 BID FORMS, VARIANCES, ALTERNATES

Bids shall be submitted on attached City forms. **BIDDERS SHALL SUBMIT SIGNED BID FORMS, ALL DOCUMENTS REQUIRING SIGNATURES AND ANY OTHER ATTACHMENTS (LICENSES, SPECIFICATIONS, ETC.) REQUIRED FOR THIS BID IN TRIPLICATE WITH ORIGINAL SIGNATURES WHERE APPLICABLE.**

Bidders shall indicate any and all variances/exceptions from the City requested specifications, terms, and conditions on sheet entitled **“EXHIBIT B”** Providing there has been no variances/exceptions or alterations attached to said bid, it shall be assumed that the bidder is meeting all requirement of the specifications. Alternate bids may or may not be considered at the sole discretion of the City.

ARTICLE 19 DISCOUNTS

Any and all discounts shall be incorporated as a reduction in the bid price and not shown separately. The price as shown on the bid shall be the price used in determining awards.

ARTICLE 20 DESCRIPTIVE INFORMATION

Unless otherwise specifically provided in the specifications, reference to any equipment, material, article or patented process, by trade name, make or catalogue number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. If the bidder wishes to make substitution to the specifications, bidder shall furnish to the City the name of the manufacturer, the model number, and other identifying data and information necessary to aid the City in evaluating the substitution, and such substitution shall be subject to City approval. Substitutions shall be approved only if determined by the City to be equivalent to the specifications. A bid containing a substitution is not accepted until such time as it is approved by the City.

ARTICLE 21 TAXES

The City of Marietta is exempt from Federal Excise and State Sale Taxes; therefore the bidder is prohibited from delineating a separate line item in his bid for any sales or service taxes. The City of Marietta does not intend to imply that a bidder has no independent tax liability.

ARTICLE 22 USE OF TRADE NAMES

Brand or trade names referenced in specifications are for comparison purposes only. Bidders may submit bids on items manufactured by other than the manufacturer specified. In these instances, bids shall be accompanied with all descriptive information necessary for a thorough evaluation of the proposed materials, equipment such as detailed drawings and specifications, certified operation and test data, and experience records, as well as an itemized list of any variance from, or exception taken to the specifications. Failure of any bidder to furnish this data shall be cause for rejection of specified item(s) to which it pertains.

ARTICLE 23 BID GUARANTEE

The City of Marietta shall request the following for proposals in excess of Forty Thousand Dollars (\$40,000.00).

23.1 BID BOND

Each bid shall include a bid bond or cashier's check in the amount of five percent (5%) of the total bid amount as guarantee that the bidder shall not withdraw the bid for One Hundred Fifty (150) days after the scheduled bid opening. If awarded the contract, Bidders shall enter a written agreement with the City of Marietta in accordance with the bid. Bid guarantee shall be returned after the City and the accepted Bidder have executed the contract agreement. Checks to be made payable to: The City of Marietta.

23.2 PERFORMANCE BOND

Upon execution and delivery of the contract, the bidder shall furnish the City a performance bond for the full amount of the contract. Maintenance provisions of the bond shall remain in effect for a period of twelve (12) months after acceptance of the work by the City. The surety shall be a reputable bonding company authorized to transact business in the State of Georgia.

23.3 PAYMENT BOND

Upon execution and delivery of the contract, the bidder shall furnish the City of Marietta a payment bond for the full amount of the contract. Maintenance provisions of the bond shall remain in effect for a period of twelve (12) months after acceptance of the work by the City. The surety shall be a reputable bonding company authorized to transact business in the State of Georgia.

ARTICLE 24 REGULATIONS, CODES AND STANDARDS

It shall be the responsibility of each supplier to assure compliance with any and all Codes & Standards including but not limited to OSHA, EPA LIFESAFETY, ANSI ASTM, UA and/or other Federal or State of Georgia rules, regulations or other requirements, as each may apply. When applicable, and as required under the provisions of Georgia's Right-To-Know-Law, the manufacturer, importer or distributor of a toxic substance shall provide a material safety sheet with the bid.

ARTICLE 25 AUTHORIZED PRODUCTION REPRESENTATION

The successful bidder(s) by virtue of submitting the name and specifications of a manufacturer's product shall be required to furnish the named manufacturer's product. By virtue of submission of the stated documents it shall be presumed by the City that the bidder(s) is/are legally authorized to submit, and the successful bidder(s) shall be legally bound to perform according to the documents.

ARTICLE 26 INSURANCE, INDEMNIFICATION, AND LIABILITY

Owner requires the vendor to have and maintain the following insurance coverage and indemnification provisions with the City of Marietta named as an additional insured thereunder:

A. INSURANCE

The Contractor agrees to provide and maintain insurance coverage until the contract is completed and to furnish certificates from its insurance carriers, showing that it carries insurance in the following minimum limits:

I. Workmen's Compensation Insurance Statutory

II. Comprehensive General Liability Insurance including:

Bodily Injury	\$1,000,000 per person \$1,000,000 per occurrence
Property Damage	\$1,000,000 per person \$1,000,000 annual aggregate

III. Automobile Liability Insurance including:

\$1,000,000 combined single
limit

B. INDEMNIFICATION

The Contractor agrees to indemnify and save harmless the Owner, its agents, assigns, and employees from and against all claims, demands, liabilities, suits, judgments and decrees, losses and costs and expenses of any kind or nature whatsoever on account of injuries to or death of any person or persons or damage to any property occurring directly or indirectly from performance of work hereunder by contractor or his employees, agents, servants, associates or subcontractors however such injuries or death or damage to property may be caused.

C. LIMITATIONS OF LIABILITY

Owner shall not be liable in contract or in tort (including negligence) to Vendor, subcontractor or suppliers of Vendor, regardless of tier, for incidental or consequential damages arising out of or resulting from Owner's performance or nonperformance of its obligations under this Agreement, or from Owner's termination or suspension of the services under this Agreement.

ARTICLE 27 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

The City of Marietta, Marietta, Georgia, in accordance with the provisions of Title VI of The Civil Rights Act of 1964(78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all proposers that it shall affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises shall be afforded full opportunity to submit proposals in response to this advertisement and shall not be discriminated against on the grounds of race, color, disability or national origin in consideration for an award.

ARTICLE 28 DRUG FREE WORKPLACE

The City of Marietta is a DRUG FREE WORKPLACE. It is required that the attached Drug Free Workplace Form (Exhibit B) be signed and returned to this office with the proposal. In the event of a tie proposal, receipt of a valid and accurate form may be used as basis for awarding the contract.

ARTICLE 29 WORK AUTHORIZATION PROGRAM

Contractor affidavit and agreement and subcontractor affidavit and agreement are attached (Exhibit C) it is required that these forms be signed and returned to this office with the proposal.

EXHIBIT A

Drug Free Work Place Certification

Identical Tie Bids - Preference shall be given to businesses with drug-free workplace program. Whenever two or more bids which equal with respect to price, quality and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that has implemented a drug-free work place program shall be given preference in the award process. Established procedures processing tie bids shall be followed if none of the tied vendors have drug-free workplace program. In order to have a drug-free workplace, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances is prohibited in the workplace and specifying the actions that shall be taken against employees for violation of such prohibition.**
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.**
- 3) Give each employee engaged in providing the commodities of contractual services that are under bid a copy of the statement specified in the subsection (1).**
- 4) In the statement specified in subsection (1), notify the employee that, as a condition of working on the commodities or contractual services that under bid, the employee shall abide by the terms of the statement and shall notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.**
- 5) Impose a sanction on, or require that satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.**
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.**

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

COMPANY NAME

AUTHORIZED SIGNATURE

EXHIBIT B

ALTERATIONS /EXCEPTIONS

SPECIAL INSTRUCTION: ALL ITEMS SHALL BE TYPED OR PRINTED

EXHIBIT C

Contractor Affidavit under O.C.G.A. § 13-10-91(b) (1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of THE CITY OF MARIETTA, GEORGIA has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ___, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

Subcontractor Affidavit under O.C.G.A. § 13-10-91(b) (3)

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with _____ (name of subcontractor) on behalf of THE CITY OF MARIETTA, GEORGIA has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five business days of receipt. If the undersigned subcontractor receives notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor to forward, within five business days of receipt, a copy of such notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Subcontractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ____, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

Sub-subcontractor Affidavit under O.C.G.A. § 13-10-91(b) (4)

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract for _____ (name of subcontractor or sub-subcontractor) with whom such sub-subcontractor has privity of contract) and _____ (name of contractor) on behalf of THE CITY OF MARIETTA, GEORGIA has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned sub-subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. § 13-10-91(b). The undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of the receipt of any affidavit from a sub-subcontractor to _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Sub-subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Sub-subcontractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, ____, 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

EXHIBIT "D"

Specifications and Guidelines

1.0 MEETINGS

- A. There shall be a **Mandatory Pre-Bid Conference** to be held Wednesday, November 5, 2014 at 2:00 P.M., located at Marietta Board of Lights and Water, Lobby Area, 675 N. Marietta Parkway, Marietta, GA 30060. The purpose of the conference is to review the specifications and familiarize the bidder with the site and scope of the work. This is a Mandatory Pre-Bid Conference and only registered attendee's bids will be accepted.

1.1 GENERAL REQUIREMENTS

- A. Specification: This specification is intended to cover all portions of this project.
- B. Reference Codes: This installation shall comply with the following does and regulations, along with all Georgia amendments.
 - 1. Current Georgia State Minimum Standard Mechanical Code.
 - 2. Current NFPA No. 90A Installation of Air Conditioning and Ventilation Systems.
 - 3. Current Georgia State Minimum Standard Plumbing Code.
 - 4. Current NFPA No. 70, National Electric Code.
 - 5. Current Georgia State Minimum Life Safety Code.
 - 6. Current Georgia State Minimum Standard Fire Prevention Code.
 - 7. Current Georgia State Energy Code for Buildings.
 - 8. City of Marietta Mechanical Code.

1.2 REGULATIONS

- A. Attention is called to the fact that all work shall be done in accordance with all applicable City, County and State regulations, which regulations shall be considered as minimum requirements, and shall not alter the arrangement and pipe sizes indicated on the plans, except where they conflict.
- B. Contractor is responsible for obtaining all permits and paying all fees required to complete the work.

1.3 DRAWINGS

- A. The work is shown on the project drawings and specifications. Except where dimensions are shown, mechanical plans are diagrammatic; verify all space dimensions at site.
- B. Copies of the Drawings can be requested through the Purchasing Department.

1.4 PROTECTION OF PUBLIC

- A. If the Contractor must operate any potentially dangerous devices before all specified safety valves controls and devices are installed, he shall notify the Engineer in writing. He shall not operate such devices under these conditions until arrangements for supervision by competent operators have been instituted and Engineer's written approval has been issued.
- B. The building where work is to be performed will be occupied during construction. Take all measures to ensure the safety of building occupants and visitors.

1.5 EXISTING SERVICES

- A. Active Services: When encountered in work, protect, brace, and support existing active water lines and other services required for proper execution of work. If existing active services are encountered that require relocation, relocate as approved. Do not prevent or disturb operation of active services that are to remain.
- B. Inactive Services: When encountered in work, remove, cap or plug inactive services. Protect or remove these services as directed.
- C. Interruption of Services: Where work makes temporary shutdown of services unavoidable, shut down at night, or at such times as approved by Owner, which will cause least interference with established operating routine. Arrange work to assure that services will be shut down only during time actually required to make connection to existing work.
- D. Existing pipe, insulation, or other material removed or damaged during the work shall be replaced as specified for new work.

1.6 NOISE AND VIBRATION

- A. When in operation, systems shall be free from objectionable noise and vibration.

1.7 FOUNDATIONS AND SUPPORTS

- A. Provide foundations, supports and means of attachment to structure for all equipment and piping furnished under this Contract.

1.8 SUBSTITUTIONS

- A. Substitutions shall be made only with the written approval of the Engineer.

1.9 SHOP DRAWINGS

- A. Shop drawings shall be submitted for but not limited to the following items:
 - 1. All equipment to be installed.
 - 2. Hangers and supports.
 - 3. Piping and accessories.
 - 4. Vibration isolation.
 - 5. Insulation.
- B. Provide with the submittal package the proposed test and balance company's credentials for work described. Include a letter from the test and balance company indicating that they will perform testing and balancing of the mechanical systems as described in that section.

1.10 INSTALLATION

- A. All equipment and materials shall be completely installed and adjusted, complete with accessories and connections.
- B. Equipment, piping, etc. shall fit into the spaces provided and shall be installed at such times and in such a manner as to avoid damage to the building and as required by the job progress. Contractor shall coordinate work with other trades and locate work described herein to avoid interferences with structural, electrical and architectural work. Equipment, accessories and similar items requiring normal servicing or maintenance shall be easily accessible.
- C. Installation shall be in accordance with manufacturers' recommendations.
- D. It is anticipated the project will be completed during the winter months (December, 2014 thru March, 2015). It is the preference of the City of Marietta that the project be completed during regular business hours (8:00 AM – 5:00 PM, Monday through Friday). The City is also requesting pricing to complete the project after hours and on weekends, if necessary.

1.11 MOTORS, WIRING AND ELECTRICAL EQUIPMENT

- A. All motors required for this work shall be built in accordance with the latest standards of National Electrical Manufacturer's Association, and shall be especially designed for quiet operation. All motors shall be selected for operation within their nameplate amperage.
- B. All electrical materials shall comply with requirements of the National Electric Code. All contactors, starters, relays and panels used in this work, which are included in Underwriters Label Service, shall be new and bear the National

1.12 WARRANTY

- A. The Contractor shall operate the air conditioning, heating and ventilating systems for one week during summer conditions to the satisfaction of the Engineer. The Contractor shall guarantee and be responsible for all materials and workmanship (parts and labor) for a period of one year following the date of acceptance by the Engineer.
- B. The Contractor shall also provide maintenance for the one year period by providing 3 periodic inspections at approximately 4 month intervals, which shall include the following:
 - 1. Check refrigerant charges and oil levels and replenish as necessary.
 - 2. Check and re-calibrate controls as necessary.
- C. Any required maintenance for the above shall be performed and materials needed shall be furnished by the Contractor. Provide the Owner with 4 copies of the inspection reports indicating all items checked and adjustment or repairs performed.

1.13 CUTTING AND PATCHING

- A. The Contractor shall set sleeves for pipes and equipment accurately before the concrete base is poured.
- B. Should the contractor neglect to perform this preliminary work and should cutting and patching be required in order to install the piping or equipment, then the expense of the cutting and restoring of surfaces to their original condition shall be borne by the Contractor.

1.14 BASIS OF DESIGN

- A. When brand, trade or manufacturers' names are used for basis of design, they are used in the interest of brevity to describe the style, type, size, quality or arrangement of articles of equipment and are not intended to limit competition. If articles of equipment by manufacturers other than basis of design are submitted for installation, the Engineer shall compare them with specified articles of equipment on basis of qualities mentioned. The size, weight and arrangement of other equipment shall be checked by the Contractor to ascertain that it can be installed, connected, operated, and serviced successfully, and that walking space and service space can be maintained without altering equipment space or enclosures or the work of other trades. Manufacturers not listed as "Acceptable Manufacturers" will not be considered.

1.15 OPERATION AND MAINTENANCE MANUALS

A. Operation and maintenance manuals (4 sets) shall be provided to the Owner or the Owner's designated representative. Manuals shall be in accordance with the Georgia State Energy Code for Buildings.

1. Manuals shall include as a minimum the following:

- a. Final, corrected submittal data with equipment sizes and selected options for each piece of equipment, including Engineer's submittal review comments.
- b. Current manufacturer's published operation and maintenance manuals for each piece of equipment.
- c. Name, address and phone number of at least one LOCAL service agency.
- d. HVAC controls system maintenance and calibration information including wiring diagrams, schematics, and control drawings.
- e. Complete narrative of how each system is intended to operate, including suggested set-points.
- f. Copy of the final test and balance report.

1.16 PIPE IDENTIFICATION

A. All piping systems shall be identified.

1. All piping systems within the building except as noted herein shall be identified with clear block letters and numbers stenciled on the outside surface of the pipe or insulation, indicating the system contents by abbreviated letters and direction of the flow.
2. This identification marking shall be applied to the pipe systems where pipe enters or leaves a wall or floor, and items of equipment.
3. Letters and numbers shall be 1" high on pipe 3" and larger.
4. Directional arrows shall be 4" long.
5. Letters and numbers shall be black on white paper or insulation.

1.17 PERMITS AND INSPECTIONS

A. The Contractor shall secure and pay for all permits, fees, inspections, and utility connection costs.

1.18 EQUIPMENT AND MATERIAL PROTECTION

A. All equipment and material shall be kept clean and free of debris as construction progresses. Closures shall be provided over piping and major equipment openings during storage, erection and prior to connection. Material finishes shall be protected by covers to prevent impingement of corrosive, abrasive and disfiguring foreign matter. Accidental finish damage shall be repaired equivalent to original finish.

1.19 TEST, ADJUST AND BALANCE

- A. Contractor shall hire an independent test, adjust and balance subcontractor. Subcontractor shall balance water flow through chiller and chilled water flow through all air handling units per original contract documents.
- B. Test, adjust and balance subcontractor shall also provide pump data, supply and return pressure, and electrical current flow for pump during full operation.
- C. Test, adjust and balance subcontractor shall provide a report of test, adjust and balance activities to the Engineer upon completion.

1.20 SITE VIST AND FAMILIARIZATION

- A. Contractors proposing to undertake this work shall Attended the **Mandatory Pre-Bid Conference** to be held Wednesday, November 5, 2014 at 2:00 P.M., located at Marietta Board of Lights and Water, Lobby Area, 675 N. Marietta Parkway, Marietta, GA 30060 site of the work and fully inform themselves of all conditions that affect the work or cost thereof, examine the drawings and specifications as related to the site conditions, and acquaint themselves with the utility companies from whom services will be supplied; verify locations of utility services and determine requirements for connections.
- B. Consideration will not be granted for any alleged misunderstanding of the amount of work to be performed. Tender of proposal shall convey full agreement to all items and conditions specified, indicated on the drawings, and/or required by nature of the site.
- C. Attention is called to the fact that this scope of work includes renovation to an existing facility. When the work is finished, the mechanical systems shall be complete in every respect, and completely integrated with all affected mechanical and control systems.
- D. Existing mechanical systems in the existing facility shall not be interrupted without prior approval or the Owner.

1.21 PIPING

- A. Standard weight black steel seamless pipe conforming to ASTM A-120 shall be used for all circulating water piping.
- B. Fittings for use with ASTM A-120 pipe:
1. Up to and including 2-1/2" shall be cast iron screwed fittings ASA B16.4, 125# class.
 2. Connections to valves and equipment shall be made with flanged fittings, Victaulic or included unions.
 3. Gaskets for flanged joints shall be 1/16" thick, ring type.
- C. Valves for use with ASTM A-120 pipe shall be as follows:
1. Valves in pipe 3" and larger shall have flanged iron body.
 2. Valves in pipe 2-1/2" and smaller shall have screwed bronze body and bronze trim.
 3. Swing check valves shall be designed for either horizontal or vertically upward flow.
 4. Combination balancing/shut-off fittings shall be B & G Circuit Setter or approved equal.
- D. Strainers
1. Y pattern, for 125 psig working pressure: screwed ends in sizes 2-1/2" and smaller, flanged ends in sizes 3" and larger; as manufactured by Schade-Davis Controls, Mueller Steam Specialty Co., Webster, McAlear, or Keckley.
- E. Pipe joints
1. Piping 3" and larger shall have welded joints made with fittings.
 1. Piping 2-1/2" and smaller shall have screwed joints made with regular standard couplings.
- F. Flush and pressure test all piping before insulation and concealment.

1.22 INSULATION

- A. Provide all insulation in conjunction with equipment and piping. Insulation finishes shall be installed tight and neatly without wrinkles, bulges, or raw edges. All ends and edges of insulation shall be neatly finished, sealed and protected. Insulation materials, mastics and finishes shall comply with NFPA rating criteria No. 255. Flame spread less than 25, smoke developed less than 50.
- B. Insulation shall conform to the following schedule:
- | Piping | Insulation Type | Thickness | Density |
|---------------|-------------------------------|-----------|---------|
| Chilled Water | Foam glass w/
Alum. Jacket | 1-1/2" | - |
- C. Insulation values over fittings and valves shall be equivalent to that for the adjacent piping unless otherwise specified. Materials used for insulating fittings and valves shall be as recommended by the insulation system manufacturer.

1.23 MECHANICAL DEMOLITION

- A. Work shall be completed in accordance with construction schedule provided with contract.
- B. Furnish all labor, equipment, materials and incidentals required to remove all existing equipment and all pipe, fittings, valves and appurtenances as indicated and not required for the proper operation of the new plumbing, heating, ventilating and air conditioning system. Removal will be consistent with the final configuration of the new systems as indicates, as specified herein, or as required by the Engineer. The equipment and piping indicated shall be removed from their present locations and shall be removed from the site as specified hereinafter.
- C. Before removal of any electrically operated equipment, coordinate carefully to assure that power and control wiring has been disconnected.
- D. It should be noted that most of the HVAC piping system is to remain. If any of the remaining portion of this system is damaged during the progress of construction or demolition, it shall be repaired or replaced to the satisfaction of the Engineer without incurring additions to the contract.

1.24 INSTALLATION OF PUMPS (ALTERNATE)

- A. It is anticipated the project will be completed during the winter months (December, 2014 thru March, 2015). It is the preference of the City of Marietta that the project be completed during regular business hours (8:00 AM – 5:00 PM, Monday through Friday). The City is also requesting pricing to complete the project after hours and on weekends, if necessary.
- B. Install pumps where shown in accordance with manufacturers' written instructions, and with recognized industry practices, to ensure that pumps comply with requirements and serve intended purposes. Comply with NEMA Standards and requirements of NEC.
- C. Coordinate with other work (piping) as necessary to interface installation of pups with piping and other components of water system.
- D. Install units on pad mounts as shown; comply with manufacturers' installation instructions.

1.30 WATER TREATMENT

- A. Contractor shall subcontract water treatment to Owner's water treatment firm: Superior Water Services (770-514-3227).
- B. After new chiller installation and hydrostatic pressure test of chilled water piping, chilled water system shall be drained, flushed and cleaned with a detergent cleaner. After cleaning, system shall be flushed and refilled with the addition of 15% DOWFROST Inhibited Propylene Glycol. Subcontractor shall provide a report of the materials used and amount of glycol added to the water system along with a test indicating the burst protection temperature allowable.

2.0 AIR COOLED WATER CHILLER

2.1 GENERAL REQUIREMENTS

- A. The requirements of this Section shall conform to the general provisions of the Contract, including General and Supplementary Conditions, Conditions of the Contract, and Contract Drawings.

2.2 SCOPE

- A. Provide Microprocessor controlled, multiple screw compressors, air-cooled, liquid chiller of the scheduled capacities as shown and indicated on the Drawings, including but not limited to:
 - 1. Chiller package with Refrigerant R-410A
 - 2. Charge of refrigerant and oil
 - 3. Electrical power and control connections, non-fused disconnect switch
 - 4. Chilled liquid connections
 - 5. Manufacturer start-up

2.3 QUALITY ASSURANCE

- A. Products shall be Designed, Tested, Rated and Certified in accordance with, and Installed in compliance with applicable sections of the following Standards and Codes:
 - 1. AHRI 550/590 – Water Chilling Packages Using the Vapor Compression Cycle
 - 2. AHRI 575 – Method of Measuring Machinery Sound Within an Equipment Space
 - 3. ANSI/ASHRAE 15 – Safety Code for Mechanical Refrigeration
 - 4. ANSI/ASHRAE 34 – Number Designation and Safety Classification of Refrigerants
 - 5. ASHRAE 90.1 – Energy Standard for Buildings Except Low-Rise Residential Buildings
 - 6. ANSI/NFPA 70 – National Electrical Code (N.E.C.)
 - 7. ASME Boiler and Pressure Vessel Code, Section VIII, Division 1
 - 8. OSHA – Occupational Safety and Health Act
 - 9. Manufactured in facility registered to ISO 9001
- B. Factory Run Test: Chiller shall be pressure-tested, evacuated and fully charged with refrigerant and oil, and shall be factory operational run tested with water flowing through the vessel.
- C. Chiller manufacturer shall have a factory trained and supported service organization in the Atlanta Metropolitan area.
- D. Warranty: Manufacturer shall Warrant all equipment and material of its manufacture against defects in workmanship and material for a period of eighteen (18) months from date of shipment or twelve (12) months from date of start-up, whichever occurs first.

2.4 DELIVERY AND HANDLING

- A. Unit shall be delivered to job site fully assembled with all interconnecting refrigerant piping and internal wiring ready for field installation and charged with refrigerant and oil by the Manufacturer.
- B. Provide protective covering over vulnerable components for unit protection during shipment. Fit nozzles and open ends with plastic enclosures.
- C. Unit shall be stored and handled per Manufacturer's instructions.

2.5 MANUFACTURERS

- A. York Model YLAA0070
- B. Carrier Model RAP070

2.6 GENERAL

- A. Description: Furnish, Install, and Commission factory assembled, charged, and operational run tested air-cooled scroll compressor chiller as specified herein and shown on the Drawings. Chiller shall include not less than two refrigerant circuits, scroll compressors, direct-expansion type evaporator, air-cooled condenser, refrigerant, lubrication system, interconnecting wiring, safety and operating controls including capacity controller, control center, motor starting components, and special features as specified herein or required for safe, automatic operation.
- B. Operating Characteristics: Provide low and high ambient temperature control options as required to ensure unit is capable of operation from 30°F to 115°F (-1°C to 46°C) ambient temperature.
- C. Cabinet: External structural members shall be constructed of heavy gauge, galvanized steel coated with baked on powder paint.
- D. Service Isolation valves: Discharge (ball type) isolation valves factory installed per refrigerant circuit. Includes a system high-pressure relief valve in compliance with ASHRAE15.
- E. Pressure Transducers and Readout Capability
 - 1. Discharge Pressure Transducers: Permits unit to sense and display discharge pressure.
 - 2. Suction Pressure Transducers: Permits unit to sense and display suction pressure.
- F. Shipping: Unit shall ship in one piece and shall require installer to provide only a single evaporator inlet and outlet pipe connection.

2.7 COMPRESSORS

A. Compressors: Shall be hermetic, scroll-type, including.

1. Compliant design for axial and radial sealing.
2. Refrigerant flow through the compressor with 100% suction cooled motor.
3. Large suction side free volume and oil sump to provide liquid handling capability.
4. Compressor crankcase heaters to provide liquid migration protection.
5. Annular discharge check valve and reverse vent assembly to provide low-pressure drop, silent shutdown and reverse rotation protection.
6. Initial oil charge.
7. Oil level sight glass.
8. Vibration isolator mounts for compressors.
9. Brazed-type connections for fully hermetic refrigerant circuits.
10. Compressor Motor overloads capable of monitoring compressor motor current. Provides protection against compressor reverse rotation, phase-loss and phase-imbalance.

2.8 REFRIGERANT CIRCUIT COMPONENTS

A. Each refrigerant circuit shall include: a discharge service ball type isolation valve, high side pressure relief, liquid line shutoff valve with charging port, low side pressure relief device, filter-drier, solenoid valve, sight glass with moisture indicator, electronic expansion valves.

2.9 HEAT EXCHANGERS

A. Evaporator:

1. Evaporator shall be brazed-plate stainless steel construction capable of refrigerant working pressure of 650 psig and liquid side pressure of 150 psig. Constructed, tested, and stamped in accordance with applicable sections of ASME pressure vessel code for minimum 235 psig refrigerant side design working pressure and 150 psig liquid side design working pressure.
2. Exterior surfaces shall be covered with 1-1/2" flexible, closed cell insulation, thermal conductivity of 0.26k ([BTU/ HR-Ft² -°F]/in.) maximum.
3. Water nozzles shall be provided with grooves for field provided ANSI/AWWA C-606 mechanical couplings.
4. Evaporator shall include vent and drain fittings and thermostatically controlled heaters to protect to -20°F (-29°C) ambient in off-cycle.
5. A 20-mesh, serviceable wye-strainer and mechanical couplings shall be factory installed on evaporator inlet prior to startup.
6. Evaporator shall be provided with piping extension kit and mechanical couplings to extend liquid connection from evaporator to edge of unit.
7. Thermal dispersion type flow switch shall be factory installed in the evaporator outlet pipe extension and wired to the unit control panel.

B. Air-Cooled Condenser:

1. Coils: Condenser coils shall be constructed of a single material to avoid galvanic corrosion due to dissimilar metals. Coils and headers are brazed as one piece. Integral sub cooling is included. Coils shall be designed for a design working pressure of 650 PSIG (45 bar). Condenser coil shall be washable with potable water under 100 psi (7 bar) pressure.
2. Low Sound Fans: Shall be dynamically and statically balanced, direct drive, corrosion resistant glass fiber reinforced composite blades molded into a low noise, full-airfoil cross section, providing vertical air discharge and low sound. Each fan shall be provided in an individual compartment to prevent cross flow during fan cycling. Guards of heavy gauge, PVC (poly-vinyl chloride) coated or galvanized steel shall be factory installed.
3. Fan Motors: High efficiency, direct drive, 6 pole, 3 phase, insulation class "F", current protected, Totally Enclosed Air-Over (TEAO), rigid mounted, with double sealed, permanently lubricated, ball bearings.

2.10 POWER AND ELECTRICAL REQUIREMENTS

A. Power/Control Panel:

1. NEMA 3R/12 rain/dust tight, powder painted steel cabinets with hinged, latched, and gasket sealed outer doors. Provide main power connection(s), control power connections, compressor and fan motor start contactors, current overloads, and factory wiring.
2. Power supply shall enter unit at a single location, be 3 phase of scheduled voltage. Factory installed non-fused disconnect.

- B. Compressor, control and fan motor power wiring shall be located in an enclosed panel or routed through liquid tight conduit.

2.11 CONTROLS

- A. General: Automatic start, stop, operating, and protection sequences across the range of scheduled conditions and transients.
- B. Power/Control Enclosure: Rain and dust tight NEMA 3R powder painted steel cabinet with hinged, latched, and gasket sealed door.
- C. Microprocessor Control Center:
 - 1. Automatic control of compressor start/stop, anti-coincidence and anti-recycle timers, automatic pump down at system shutdown, condenser fans, evaporator pump, evaporator heater, unit alarm contacts, and chiller operation from 0°F to 125°F (-18°C to 52°C) ambient. Automatic reset to normal chiller operation after power failure.
 - 2. Remote water temperature reset via 0-10 VDC or 4-20 mA input signal.
 - 3. Software stored in non-volatile memory, with programmed set points retained in lithium battery backed real-time-clock (RTC) memory for minimum 5 years.
 - 4. Forty character liquid crystal display, descriptions in English (or Spanish, French, Italian, or German), numeric data in English (or Metric) units. Sealed keypad with sections for Set points, Display/Print, Entry, Unit Options & clock, and On/Off Switch.
 - 5. Programmable Set points (within Manufacturer limits): display language; chilled liquid temperature set point and range, remote reset temperature range, daily schedule/holiday for start/stop, manual override for servicing, low and high ambient cutouts, low liquid temperature cutout, low suction pressure cutout, high discharge pressure cutout, anti-recycle timer (compressor start cycle time), and anti-coincident timer (delay compressor starts).
 - 6. Display Data: Return and leaving liquid temperatures, low leaving liquid temperature cutout setting, low ambient temperature cutout setting, outdoor air temperature, English or metric data, suction pressure cutout setting, each system suction pressure, liquid temperature reset via a 4-20milliamp or 0-10 VDC input, anti-recycle timer status for each compressor, anti-coincident system start timer condition, compressor run status, no cooling load condition, day, date and time, daily start/stop times, holiday status, automatic or manual system lead/lag control, lead system definition, compressor starts/operating hours (each), status of hot gas valves, evaporator heater and fan operation, run permissive status, number of compressors running, liquid solenoid valve status, load & unload timer status, water pump status.
 - 7. System Safeties: Shall cause individual compressor systems to perform auto shut down; manual reset required after the third trip in 90 minutes. System Safeties include: high discharge pressure, low suction pressure, high pressure switch, and motor protector. Compressor motor protector shall protect against damage due to high input current or thermal overload of windings.
 - 8. Safeties: Shall be automatic reset and cause compressors to shut down if low ambient, low leaving chilled liquid temperature, under voltage, and flow switch operation.
 - 9. Alarm Contacts: Low ambient, low leaving chilled liquid temperature, low voltage, low battery, and (per compressor circuit): high discharge pressure, and low suction pressure.
 - 10. BAS Communications: YORKTalk 2, BACnet MS/TP, Modbus and N2 communication capabilities are standard. (Option: LON communication via ELink Microgateway).
 - 11. Alarm contact for Owner's SCADA to signal abnormal chiller shut down.
- D. Manufacturer shall provide any controls not listed above, necessary for automatic chiller operation. Installing Contractor shall provide field control wiring necessary to interface sensors to the chiller control system.

2.12 ACCESSORIES AND OPTIONS

The following accessories and options are factory-mounted unless otherwise noted.

- A. Control Power Transformer: Converts unit power voltage to 120-1-60 (500 VA capacity). Factory-mounting includes primary and secondary wiring between the transformer and the control panel.
- B. Protective Chiller Panels (TO BE QUOTED AS ALTERNATE)
 - 1. Louvered Panels (full unit): Painted steel as per remainder of unit cabinet, to protect condenser coils from incidental damage, visually screen internal components, and prevent unauthorized access to internal components.
- C. Sound Reduction (Factory installed); (TO BE QUOTED AS ALTERNATE)
 - 1. Ultra Quiet - Low speed, reduced noise fans.
 - 2. Compressor Acoustic Sound Blankets.
- D. Vibration Isolation (Field installed):
 - 1. Elastomeric Isolators.

2.13 INSTALLATION

- A. General: Rig and Install in full accordance with Manufacturer's requirements, Project drawings, and Contract documents.
- B. Location: Locate chiller as indicated on drawings, including cleaning and service maintenance clearance per Manufacturer instructions. Adjust and level chiller on support structure.
- C. Components: Installing Contractor shall provide and install all auxiliary devices and accessories for fully operational chiller.
- D. Electrical: Coordinate electrical requirements and connections for all power feeds.
- E. Controls: Coordinate all control requirements and connections with Controls Contractor.
- F. Finish: Installing Contractor shall paint damaged and abraded factory finish with touch-up paint matching factory finish.

3.0 CONTROLS

- 3.1 It is the intent of these specifications that the new air-cooled water chiller will run under its own microprocessor control system for normal functions, supply temperature, control, unloading capacity, etc. The new chiller will be interfaced with existing automatic control systems for time of day start/stop, emergency stop and other listed control sequences on the drawings.
- 3.2 Contractor shall familiarize himself with existing controls and inform the Owner of missing or inoperable controls necessary to accomplish the specified functions.
- 3.3 Interface with existing control systems shall be through existing conduits and where possible using existing wiring.
- 3.4 Contractor shall provide connections and interface with Owner specified SCADA, security or other building automation system to alarm conditions when the chiller is shut down on abnormal operating conditions. This connection will be programmed to notify Owner's personnel in the event of a chilled water system failure.
- 3.5 Sequence of control is outlined on the drawings.

References

Bidder shall provide at least four (4) customer reference(s) over the past five-year period for which you have provided equivalent services to this Proposal, Bid, or Quote. Do not provide the name of a reference unless verified that the person can be contacted at the number provided.

#1 Company Name: _____

Contact Person: _____ Title: _____

E-mail: _____ Telephone Number: _____

Project Description: _____

Project Date & Value: _____ Fax Number: _____

#2 Company Name: _____

Contact Person: _____ Title: _____

E-mail: _____ Telephone Number: _____

Project Description: _____

Project Date & Value: _____ Fax Number: _____

#3 Company Name: _____

Contact Person: _____ Title: _____

E-mail: _____ Telephone Number: _____

Project Description: _____

Project Date & Value: _____ Fax Number: _____

#4 Company Name: _____

Contact Person: _____ Title: _____

E-mail: _____ Telephone Number: _____

Project Description: _____

Project Date & Value: _____ Fax Number: _____



EXHIBIT E

BID FORM

Replacement of an Air Cooled Water Chiller at the BLW Administrative Offices

RFB-15-36414

1. BASE BID

- A. Remove existing chiller and replace with new air cooled water chiller as described in plans and specification \$ _____
- B. Manufacturer's extended warranty, up to 5 years (If additional costs) \$ _____

2. ADD ALTERNATE NO. 1

- A. Replace existing chilled water pump \$ _____
- B. Manufacturer's extended warranty, up to 5 years (If additional costs) \$ _____

3. ADDITIONAL CHILLER OPTIONS

- A. Manufacturer's factory installed sound reduction package \$ _____
- B. Manufacturer's factory installed side louvers \$ _____
- C. Manufacturer's extended warranty, up to 5 years \$ _____

- 4. Contractors proposing to undertake this work shall Attended the **Mandatory Pre-Bid Conference** to be held Wednesday, November 5, 2014 at 2:00 P.M., located at Marietta Board of Lights and Water, Lobby Area, 675 N. Marietta Parkway, Marietta, GA 30060 site of the work and fully inform themselves of all conditions that affect the work or cost thereof, examine the drawings and specifications as related to the site conditions, and acquaint themselves with the utility companies from whom services will be supplied; verify locations of utility services and determine requirements for connections.
- 5. It is anticipated the project will be completed during the winter months (December, 2014 thru March, 2015). It is the preference of the City of Marietta that the project be completed during regular business hours (8:00 AM – 5:00 PM, Monday through Friday). The City is also requesting pricing to complete the project after hours and on weekends, if necessary.

Estimated turnaround time for completion of work: _____

Bid submitted by:

Company Name: _____

Address: _____

City, State, Zip: _____

Authorized Signature: _____

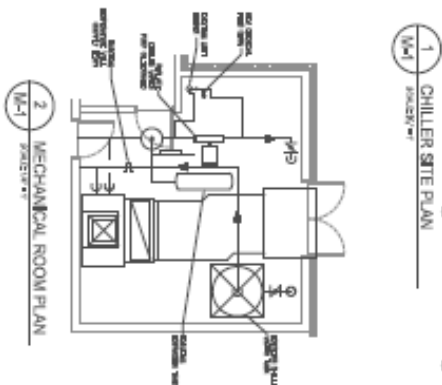
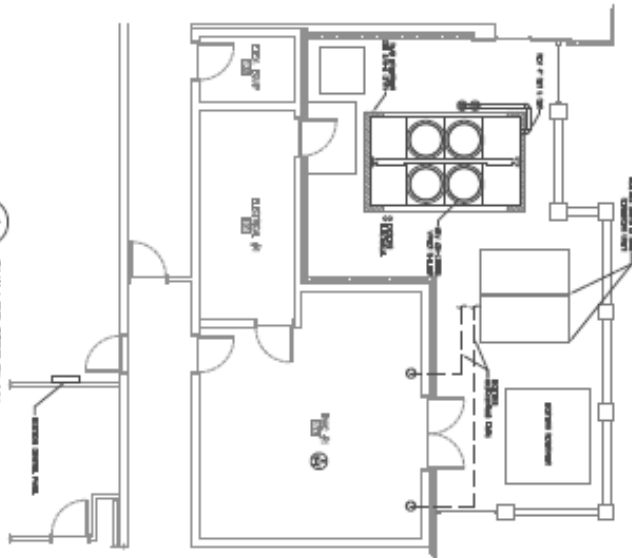
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Telephone: _____ Fax: _____

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